

**IN THE SPECIFICATION:**

Please delete the sequence listing filed with this application and insert the attached substitute sequence listing into the application at the appropriate location.

Please further amend the specification as follows:

Please delete paragraph [042] and replace it with the following paragraph:

[042] SEQ ID NO: 1 contains the following subparts: Nucleotides 1-1205 comprise the HLA-A2 promoter; nucleotides 1206-1265 the HLA-A2 leader sequence; nucleotides 1266-1565 the human  $\beta 2$  microglobulin cDNA; nucleotides 1566-1610 a (Gly4Ser)<sub>3</sub> linker (**SEQ ID NO: 4**); nucleotides 1611-2440 a segment containing exon 2 and part of intron 3 of HLA-A2; and nucleotides 2441-4547 a segment containing part of intron 3, exons 4 to 8, and part of the 3'non-coding region of the H<sub>2</sub>D<sup>b</sup> gene.

Please delete paragraph [0104] and replace it with the following paragraph:

[0104] The *HLA-DRB1\*0101*, *HLA-DRA\*0101* and *HLA-A\*0201* transgenes were detected by PCR. Tail-DNA was extracted after overnight incubation at 56°C in 100 mM NaCl, 50 mM Tris-HCl pH 7.2, 100 mM EDTA, 1 % SDS and 0.5 mg/ml proteinase K, followed by the addition of 250  $\mu$ L of saturated NaCl solution and isopropanol precipitation. The samples were washed (3x) in 70 % ethanol and resuspended in 150  $\mu$ L of 10 mM Tris-HCl, 1 mM EDTA pH 8. PCR conditions were: 1.5 mM MgCl<sub>2</sub>, 1.25 U of Taq Polymerase, buffer supplied by the manufacturer (InVitrogen, Carlsbad, CA), 1

cycle (7 min, 94 °C), 40 cycles (30 sec, 94 °C ; 30 sec, 60 °C ; 1 min, 72 °C), 1 cycle (4 min, 72°C), using as forward and reverse primers, for *HHD* : 5'CAT TGA GAC AGA GCG CTT GGC ACA GAA GCA G 3' (**SEQ ID NO: 5**) and 5'GGA TGA CGT GAG TAA ACC TGA ATC TTT GGA GTA CGC 3' (**SEQ ID NO: 6**), for *HLA-DRB1\*0101* : 5'TTC TTC AAC GGG ACG GAG CGG GTG 3' (**SEQ ID NO: 7**) and 5'CTG CAC TGT GAA GCT CTC ACC AAC 3' (**SEQ ID NO: 8**), and for *HLA-DRA\*0101* : 5' CTC CAA GCC CTC TCC CAG AG 3' (**SEQ ID NO: 9**) and 5'ATG TGC CTT ACA GAG GCC CC 3' (**SEQ ID NO: 10**).

Please delete paragraph [0110] and replace it with the following paragraph:

[0110] The HLA-A2 binding peptides HBsAg<sub>348-357</sub> GLSPTVWLSV (**SEQ ID NO: 11**) and HBsAg<sub>335-343</sub> WLSLLVPFV (**SEQ ID NO: 12**), the H-2 Kb binding peptide HBsAg<sub>371-378</sub> ILSPFLPL (**SEQ ID NO: 13**), the HLA-DR1 binding peptide HBsAg<sub>180-195</sub> QAGFFLLTRILTIPQS (**SEQ ID NO: 14**), the H-2 IA<sup>b</sup> binding peptide HBsAg<sub>126-138</sub> RGLYFPAGGSSSG (**SEQ ID NO: 15**) and the preS2 peptide HBsAg<sub>109-134</sub> MQWNSTTFHQTLQDPRVRGLYFPAGG (**SEQ ID NO: 16**) were synthesized by Neosystem (Strasbourg, France) and dissolved in PBS-10 % DMSO at a concentration of 1 mg/ml. The numbering of the amino acid sequence of peptides starts from the first methionine of the HBV ayw subtype preS1 domain.

Please delete paragraph [0130] and replace it with the following paragraph:

[0130] Additional data obtained from these mice is provided in the following Tables 1-3.

Table 1. Proliferative responses of T CD4+ against HBV virus envelope HLA-DR1 epitopes from HLA-A2+DR1+H-2 CI-CII-transgenic mice injected with pcmv S2-S **(SEQ ID NOS 16, 17, 14 & 18)**

position	Amino Acid sequence	Responder/tested mice index	Stimulation
109-134	MQWNSTTFHQTLDPRVRGLYFPAGG	(12/12)	3-4
200-214	TSLNFLGGTTVCLGQ	(6/12)	3-4
16/31	QAGFFLLTRILTIPQS	(12/12)	3-6
337/357	SLLVPFVQWFVGLSPTVWLSV	(5/12)	4-5

Table 2. Cytolytic response to HLA-A2+DR1+H-2 CI-CII-transgenic mice injected with pcmv S2-S **(SEQ ID NOS 19 & 20)**

position	Amino Acid sequence	Responder/tested mice	Maximal lysis
348-357	GLSPTVWLS	(12/12)	20-70%
335-343	WLSLLVPVF	(4/12)	30%

Table 3. Anti-PreS2 Antibody response anti of HLA-A2+DR1+H-2 CI-CII transgenic mice injected with pcmv S2-S **(SEQ ID NO: 16)**

position	Amino Acid sequence	Responder/tested mice
preS2	MQWNSTTFHQTLDPRVRGLYFPAGG	(9/12)

**Example 5: Immune Response to HBsAg-DNA-Vaccine**